

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

REC'D 19 MAY 2004

WIPO PCT

Applicant's or agent's file reference LAS01535WO	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/US 02/40278	International filing date (day/month/year) 16.12.2002	Priority date (day/month/year) 22.01.2002
International Patent Classification (IPC) or both national classification and IPC F16B37/06		
Applicant FABRISTEEL PRODUCTS, INC. et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 6 sheets, including this cover sheet.


☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

 These annexes consist of a total of 1 sheets.

3. This report contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited

Defects in the international application

in the international application

Date of submission of the demand 18.07.2003	Date of completion of this report 18.05.2004
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Gonzalez Davila, J-C Telephone No. +49 89 2399-2767



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EXAMINATION REPORT**

International application No. **PCT/US 02/40278**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17))*):

Description, Pages

1-9 as originally filed

Claims, Numbers

1-8 as originally filed

9*, 10-12 received on 13.02.2004 with letter of 13.02.2004

Drawings, Sheets

1/4-4/4 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-10
	No: Claims	11,12
Inventive step (IS)	Yes: Claims	1-10
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-12
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. None of the prior art documents describes a process as set forth in claim 1, including the step of continuing to drive the annular lip of the die member against the panel portion and the annular outer portion of the pilot portion and deforming the pilot portion against the bottom wall of the annular groove, thereby deforming the panel portion radially inwardly and outwardly entrapping the panel portion in the annular groove and sealing the female member of the panel.
2. The above features are neither known from, nor rendered obvious in respect of prior art so that claim 1 therefore meets the requirements of Articles 33(2) and 33(3) PCT.
3. Claims 2 to 4 contain advantageous modifications of the inventive idea embodied in claim 1 and also meet the requirements of Articles 33(2) and 33(3) PCT.
4. None of the prior art documents describes a process as set forth in claim 5, including the step of continuing to drive the annular lip of the die member against the outer portion of the pilot portion and the panel portion against the bottom wall of the annular groove, thereby deforming the panel portion radially and deforming the annular outer portion of the pilot portion against the panel portion, thereby entrapping the panel portion in the annular groove and sealing the female member of the panel.
5. The above features are neither known from, nor rendered obvious in respect of prior art so that claim 5 therefore meets the requirements of Articles 33(2) and 33(3) PCT.
6. Claims 6 to 8 contain advantageous modifications of the inventive idea embodied in claim 5 and also meet the requirements of Articles 33(2) and 33(3) PCT.
7. None of the prior art documents describes a sealed female fastener and panel assembly as set forth in claim 9, wherein the pilot portion includes a cylindrical end portion above the third annular panel portion and an integral annular portion

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shaved from the pilot portion deformed against an inner opposed end portion of the third annular panel portion, whereby the inclined outer wall of the annular groove and the integral annular portion shaved from the pilot portion securely retains the female fastener on the panel portion in sealed relation.

8. The above features are neither known from, nor rendered obvious in respect of prior art so that claim 9 therefore meets the requirements of Articles 33(2) and 33(3) PCT.
9. Claims 10 contains advantageous modifications of the inventive idea embodied in claim 9 and also meet the requirements of Articles 33(2) and 33(3) PCT.
10. Document EP-A-0864 766 comprises a self-attaching female fastener element, comprising a cylindrical pilot portion including an annular generally planar end face and a bore extending through the pilot portion through the end face, an annular flange portion surrounding the pilot portion having a planar end face parallel to the end face of the pilot portion, and an annular groove in the flange portion surrounding the pilot portion including an annular bottom wall, an annular inner side wall defining an outer surface of the pilot portion and an annular outer side wall, the annular side wall including an arcuate annular radially outwardly inclined surface adjacent the annular bottom wall and the annular outer wall arcuately inclined radially inwardly from the annular bottom wall toward the pilot portion to adjacent the annular end face of the flange portion.
11. Because all the features of claim 11 are known the claim does not satisfy the requirements set forth in article 33(2) PCT as regards novelty.
12. The features according to claim 12 are also known from document EP-A-0864 766.

Additional Observations

1. The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).
2. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art

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disclosed in document EP-A-0864 766 has not been mentioned in the description,
nor has been this document identified therein.

REPLACED BY
ART 34 AMDT

said pilot portion including a cylindrical end portion above said third annular panel portion and an integral annular portion shaved from said pilot portion deformed against an inner opposed end portion of said third annular panel portion, whereby said inclined annular outer wall of said annular groove and said integral annular portion shaved from said pilot portion securely retains said female fastener on said panel portion in sealed relation.

10. The sealed female fastener and panel assembly as defined in Claim 9, wherein said integral annular portion shaved from said pilot portion includes an arcuate surface deformed against said third panel portion.

11. A self-attaching female fastener element, comprising:
a generally cylindrical pilot portion including an annular generally planar end face and a bore extending through said pilot portion through said end face;
an annular flange portion surrounding said pilot portion having a planar end face parallel to said end face of said pilot portion; and
an annular groove in said flange portion surrounding said pilot portion including an annular bottom wall, an annular inner side wall defining an outer surface of said pilot portion and an annular outer side wall, said annular inner side wall including an arcuate annular radially outwardly inclined surface adjacent said annular bottom wall and said annular outer wall arcuately inclined radially inwardly from said annular bottom wall toward said pilot portion to adjacent said annular end face of said flange portion.

12. The self-piercing female fastener element as defined in Claim 1, wherein said pilot portion includes a generally cylindrical surface adjacent said end face of said pilot portion.